

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (currently amended): A method of displaying two images in registration with each other comprising the steps of comparing the two images to each other, calculating a transformation which maps features in one image to corresponding features in the other, displaying the two images in superimposition based on the transformation, calculating a measure of a local confidence in the registration of the two images with each other, wherein said measure of confidence is calculated from the degree of transformation required to perform said mapping, and displaying said measure of the local confidence in the registration of the two images with each other.

Claim 2 (cancelled).

Claim 3 (currently amended): A method according to claim [[2]] 1 wherein said measure of confidence is calculated from the degree of non-rigid deformation in said calculated transformation.

Claim 4 (currently amended): A method according to claim [[2]] 1 wherein said measure is calculated excluding rigid motions.

Claim 5 (currently amended): A method according to claim [[2]] 1 wherein said measure of confidence is calculated from the magnitude of the local deformation in said transformation.

Claim 6 (currently amended): A method according to claim [[2]] 1, wherein said measure of confidence is calculated from the local change of volume implied by the transformation

Claim 7 (previously presented): A method according to claim 1 wherein the measure is selectively displayed in response to user input.

Claim 8 (previously presented): A method according to claim 1 wherein the confidence measure is displayed overlaid on the two images.

Claim 9 (previously presented): A method according to claim 1 wherein the measure is displayed as a visually distinguishable overlay on the two images, the visual properties of the overlay at any point being based on the said measure.

Claim 10 (original): A method according to claim 9 wherein the colour of the visually distinguishable overlay is varied in dependence on said measure.

Claim 11 (previously presented): A method according to claim 9 wherein the intensity of the visually distinguishable overlay is varied in dependence on said measure.

Claim 12 (original): A method according to claim 9 wherein the grey-level of the visually distinguishable overlay is varied in dependence on said measure.

Claim 13 (original): A method according to claim 8 wherein the confidence measure is displayed next to the displayed superimposed images.

Claim 14 (previously presented): A method according to claim 9 wherein the visually distinguishable overlay comprises a symbol having a property which depends on the value of said measure at a selected display point.

Claim 15 (original): A method according to claim 14 wherein the symbol is one of a circle and an error bar whose size depends on the value of said measure at a selected display point.

Claim 16 (previously presented): A method according to claim 14 wherein the symbol is displayed at any time only at a single selected display point.

Claim 17 (previously presented): A method according to claim 1 wherein the images are medical images.

Claim 18 (currently amended): A computer-readable storage medium storing a computer program product, ~~computer program product~~ comprising program code means for executing ~~on a programmed computer~~ the method of claim 1, ~~said computer program product stored on a computer-readable storage medium.~~

Claim 19 (currently amended): A computer-readable storage medium storing a computer program comprising ~~computer program comprising~~ program code for executing ~~on a programmed computer~~ the method of claim 1, ~~said computer program stored on a computer-readable storage medium.~~

Claim 20 (previously presented): An image display apparatus comprising a display, and an image processor adapted to perform the method of claim 1.